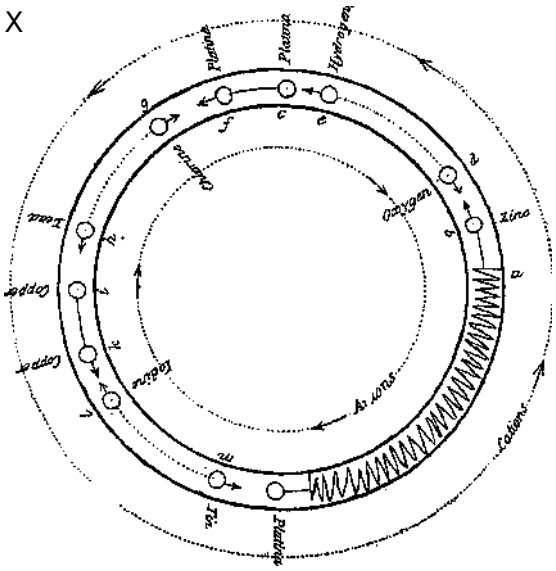
part of it at the moment, will also move from right to left: and as the oxygen of the water, by its natural affinity for the zinc, moves from left to right, so any other body of the same class with it *(i.e.* any other *anion),* under its government for the time, will move from left to right.

698. This I may illustrate by reference to fig. 43, the double circle of which may represent a complete voltaic circuit, the direction of its forces being determined by supposing for a

X



' Fig. 43.

moment the zinc *b* and the platina *c* as representing plates of those metals acting upon water, *d, e,* and other substances, but having their energy exalted so as to effect several decompositions by the use of a battery at *a* (725). This supposition may be allowed, because the action in the battery will only consist

of repetitions of what would take place between *b* and *c,* if they really constituted but a single pair. The zinc *b,* and the oxygen *d* by their mutual affinity, tend to unite; but as the oxygen is already in association with the hydrogen *e,* and has its inherent chemical or electric powers neutralised for the time by those of the latter, the hydrogen *e* must leave the oxygen *d,*